Product Specification

Customer Name:	
Product	3.5 " Internal card reader
Designed for	
Part No.	AK-ICR-03USBV3
Issue Date	2012/09/25
Spec No.	
Version	V1.0

Customer Approved By	Design	Inspect	Check
	Edison Hsieh		

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Revision History

No.	Rev	Modified Description	Date
01	V1.0	Primary Issue	Sep-25-2012

1. Product Features

- This Internal Card reader, Combination of CF / xD / Smart Media/SD/MS
- Power LED : green , Data Access LED : Red。
- This multi-card reader supports read and write on more than one card at the same time
- Hi-speed USB 2.0 transfers speed up to 480Mb/s
- One external USB2.0 port for extra connectivity.
- Support Windows 7/Vista/XP/2000 operating system.

2. Contents

- AK-ICR-03USBV3 Card Reader
- Screws *4

3. Operating Environment

- Operating Temperature: 0℃~55℃
- Operating Humidity: 10%~90%
- Storage Temperature: -20℃~70℃
- Storage Humidity: 10%~90%

4. Control Chipset Description

4.1 Description of AU6476

The AU6476-GCL is a single chip integrated USB 2.0 multimedia card reader controller that enables PC/DVD/Printer to read/write various type of flash media cards. Flash media cards such as CF, SMC, XD, SD, MMC, Memory Stick are widely used in digital camera, cell phone, PDA and MP3 player to store digital photos and compressed music.

Performance of AU6476-GCL is maximized by implementing the latest and fastest card specification available form the industry.

Especially, AU6476-GCL is designed with the high performance characteristic in flash card I/O speed. Users can easy and fast transfer the digital content among the different flash card.

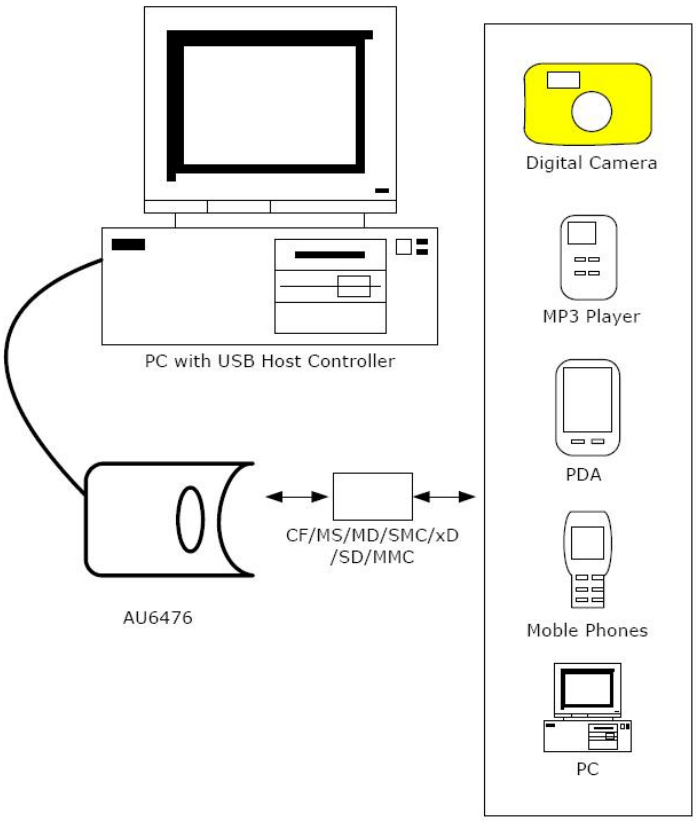
5. Control Chipset Features

5.1 Features of AU6476

- Support USB V2.0 specification and USB Device Class Definition for Mass Storage, Bulk-Transport V1.0
- Support SD spec up to ver. 2.0 (SDHC).
- Support MMC spec up to ver. 4.2 with 4-bit data bus.
- Support CF spec up to ver. 4.1 up toTrue IDE PIO mode 6.
- Support xD spec up to ver. 1.2
- Support Memory Stick spec up to ver. 1.43.
- Support Memory Stick PRO spec up to ver. 1.03.
- Support Memory Stick PRO-HG spec up to ver. 1.01 with 4-bit data bus.
- Support SMC spec up to ver. 1.4
- Hardware DMA engine integrated for performance enhancement.
- Work with default driver from Windows ME/2000/XP/Vista/Windows 7 and Mac OS X; Vendor device driver from Alcor Micro are available to run under Windows 98 and Mac 9.
- Ping-pong FIFO implementation for concurrent bus operation
- Support multiple sectors transfer optimize performance
- Support slot-to-slot read/write operation
- Support Dynamic Icon Utility
- Support LED for bus operating indication
- Power switch integrated to reduce production BOM cost
- 30MHz 8051 CPU
- Built in 5V to 3.3V/1.8V regulator
- Runs at 12MHz crystal
- Available in 80-pin LQFP package

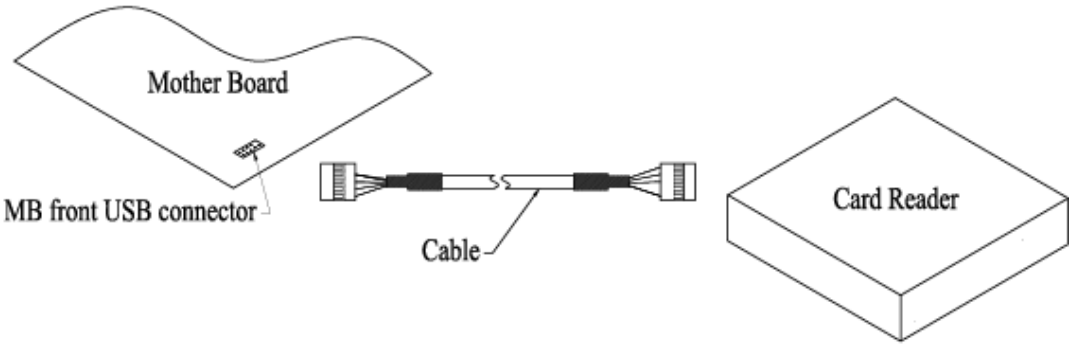
6. Block Diagram

6.1 AU6476 Block Diagram

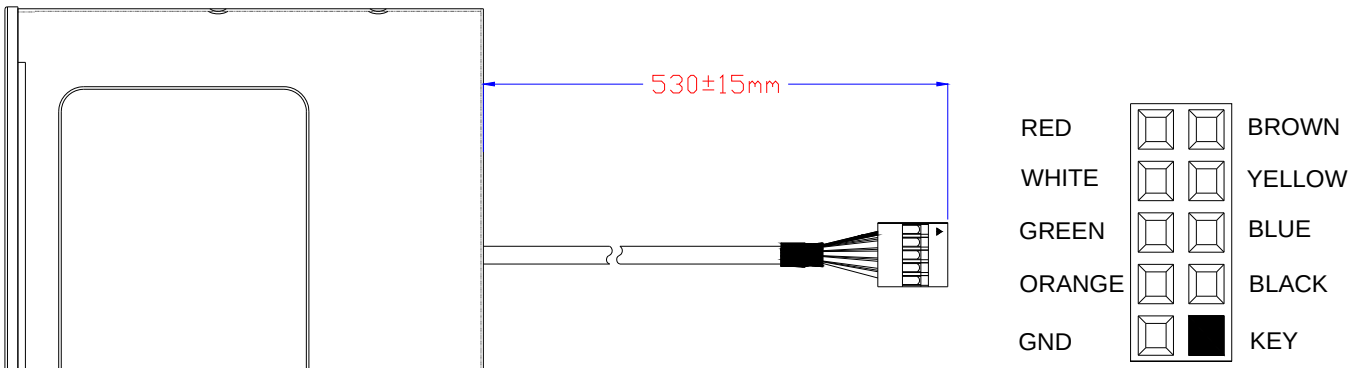


7. Concept Drawing

USB ports of PC for the card reader Concept Drawing

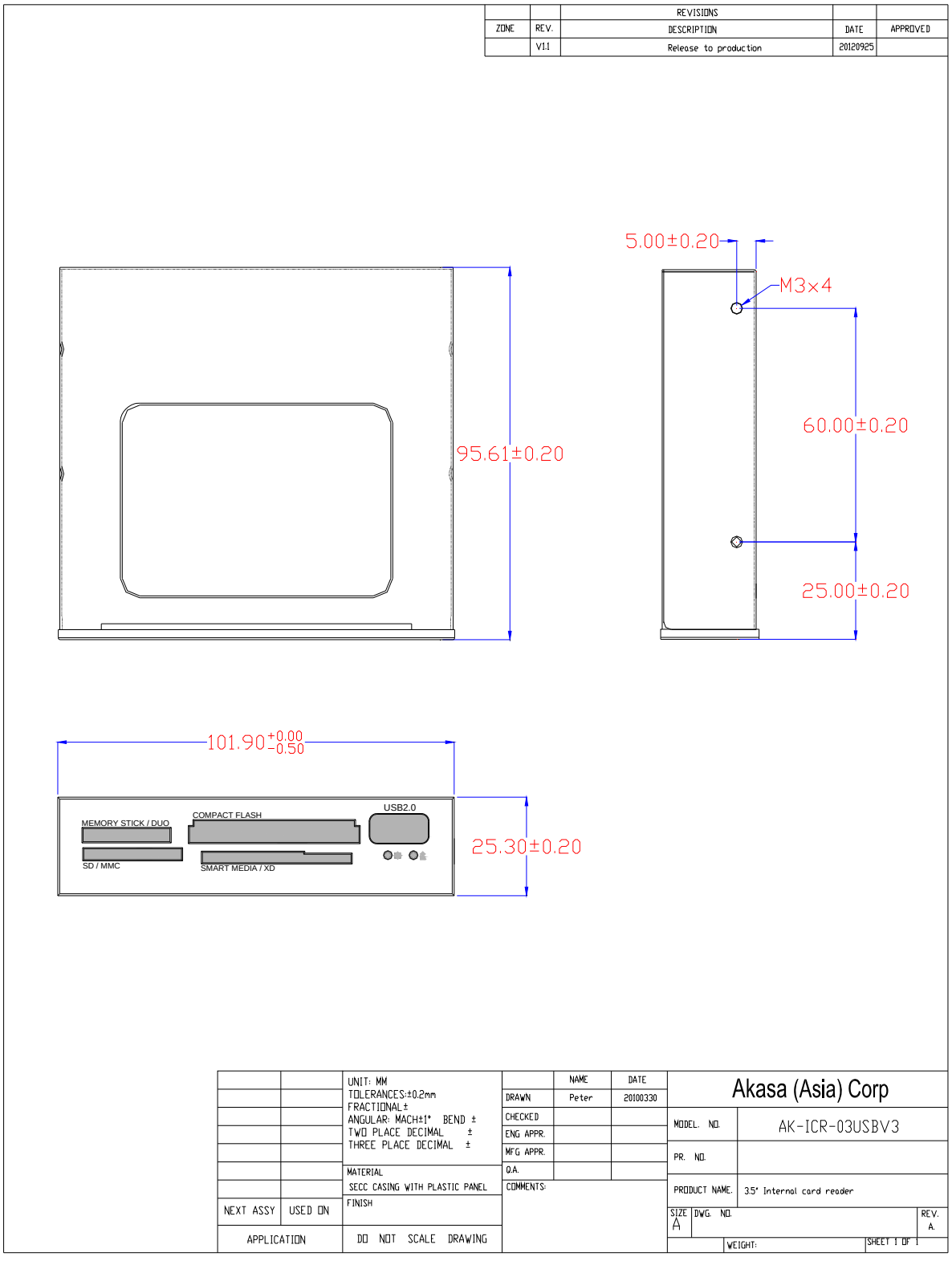


8. Cable length and connector Pin Define



Red	USB1	Power Supply (+5V)
White	USB1	D-
Green	USB1	D+
Orange	USB1	Ground
Brown	USB2	Power Supply (+5V)
Yellow	USB2	D-
Blue	USB2	D+
Black	USB2	Ground

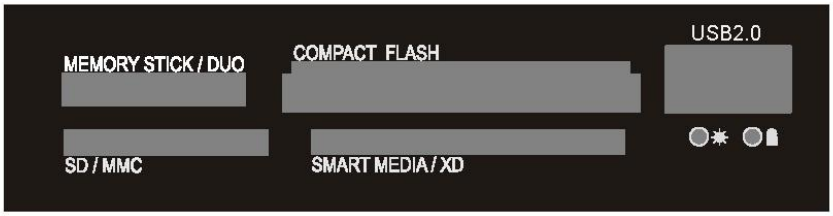
9. Mechanical Drawing



10. Panel silkscreen drawing

(Item)		(Specification/Condition)
01	Material	Plastic
02	Amount	Black *1

白色絲印油墨 (WHITE INK)



11. Screw

(Item)		(Specification/Condition)
01	Material	Iron with nickel plate
02	Amount	X4
03	Dimensions	M3 x6 (L) mm